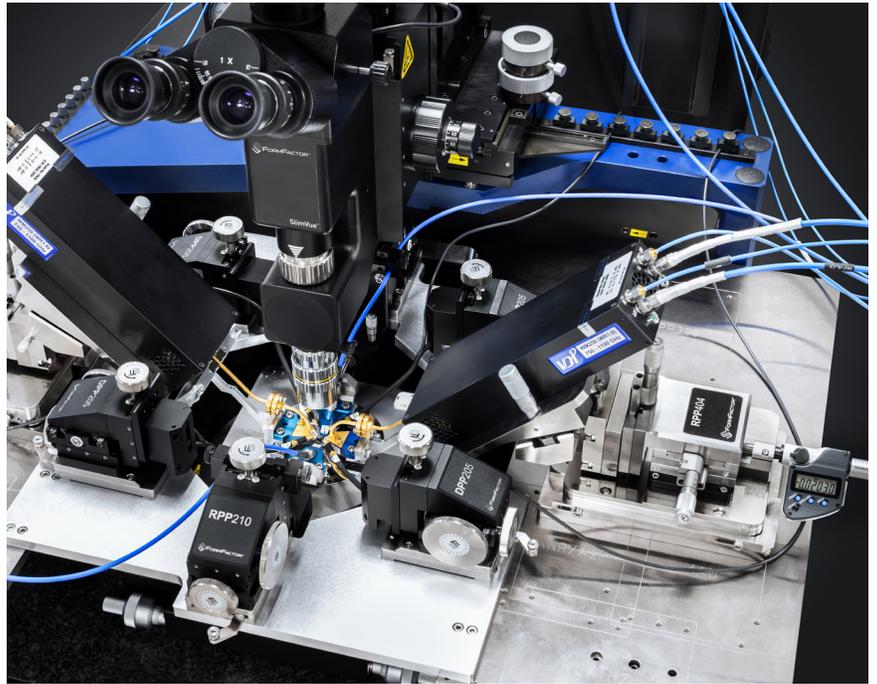


# Cascade EPS200MMW

A dedicated 200 mm manual  
probing solution for mmW,  
THz and load pull applications



## Benefits

### Make everyone an RF expert

Best-known methods and design for highest measurement accuracy up to THz

### Ensure calibration accuracy

WinCal XE – the leading RF on-wafer calibration software

### Increase dynamic range and directivity

Shortest signal path from instrument to device

### Protect your investment for the future

Re-configure and upgrade as requirements grow

### Minimize training efforts

Designed for convenience and ease of use

The EPS200MMW is a dedicated probing solution that comes with everything needed to efficiently achieve accurate measurement results, incorporating best-known methods and design concepts for probing up to THz frequencies.

With a solid cast frame and a platen with four-point support, the EPS200MMW delivers excellent stability, making it easy to achieve high accuracy. Its polished granite base eliminates any thermal or mechanical influences, ensuring excellent planarity and system stability. An integrated vibration isolation solution and an optional vibration-isolation table maintain high-quality contacts throughout measurements.

The unique SIGMA™ options seamlessly integrate mmW heads and load pull tuners from leading measurement instrument suppliers, enabling the highest dynamic range and directivity without compromising electrical accuracy and mechanical stability. The SlimVue™ microscope mitigates mechanical interference for high-magnification optics required for small-pad probing.

The backlash-free X-Y-Z movement of positioners, integrated planarization and a contact separation drive with 1 μm repeatability enable precise probe placement and contact repeatability, equivalent to semi-automated systems. The WinCal XE™ software, verified standards and optimized calibration boundary conditions achieve superior calibration accuracy up to THz range, verifying the accuracy of your measurement results.

An intuitive operation workflow with the innovative fine-glide chuck stage which offers both wide-range coarse movement and μm-level fine movement, contact gauge, probe crash protector, integrated auxiliary chuck, and the WinCal XE ensures ease of operation for both the novice and the expert user.

Designed for upgradeability and extendable with multiple options, the EPS200MMW system can be easily reconfigured to meet your future project requirements.

# EPS200MMW

## SlimVue™ microscope with C-mount

- Dedicated design to reduce the signal path
- Accurate probe placement on small pads

## Contact height gauge

- Precise overtravel adjustment
- Feedback on the on the contact position

## Tailored mmW platen and 40 mm travel range

- Ready for broadband, mmW, THz and load pull applications
- Easy system re-configuration and upgrade

## Unique chuck stage

- Quick coarse Y/X movement and sub-micron positioning
- X/Y stepping with independent axes lock for easy linear navigation

## Unique 500 μm platen contact/separation stroke

- Highest contact accuracy and consistency over entire wafer
- Convenient and easy to use

## Quick scope height adjustment

- Easy re-configuration for load pull and sub-THz applications

## Dedicated SIGMA options

- Broadband 110 GHz, banded mmW, THz and load pull applications
- Platform tilt for precise probe planarization

## Innovative ceramic AUX chuck

- Homogeneous and optimized calibration conditions

## Dedicated RF chuck

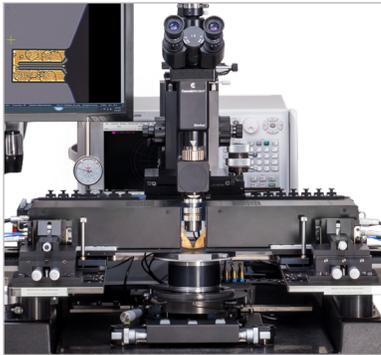
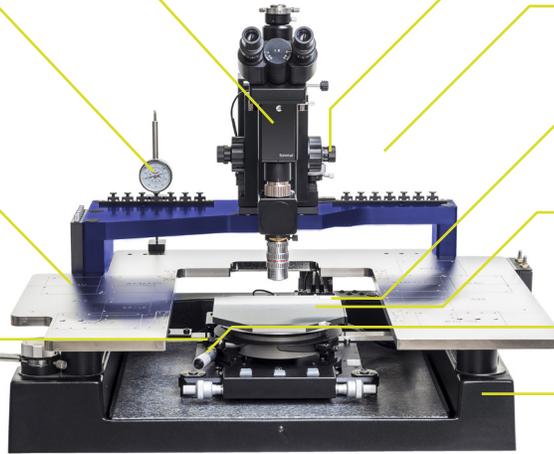
- $< \pm 3 \mu\text{m}$  chuck planarity
- Consistent measurement boundary conditions and overtravel over entire wafer

## Fine theta adjustment

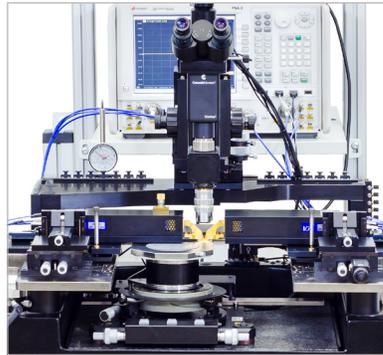
- Precise probe-to-pad alignment

## Vibration-isolation solution

- Ensures contact and minimizes pad damage



Universal mounting of frequency extenders from VDI for measurements up to 1.1 THz.



Full integration of VDI mini frequency extenders (left) and Focus Microwave's Load-Pull Delta Tuners (right). The RF arms are equipped with a dove tail that makes it easy, safe and fast to change between different measurement applications.



## Ordering Information

### Part Number

EPS200MMW

EPS-ACC-150MMW-ARS

EPS-ACC-150MMW-ANR

EPS-ACC-150MMW-MAU

EPS-ACC-150MMW-WG

EPS-ACC-150MMW-THZ

EPS-ACC-UG-THZ-WG

### Description

200 mm manual probing solution\* for mmW, THz and load pull applications

Instrument integration for 110 GHz broadband systems from Keysight and Rohde & Schwarz

Instrument integration for 110 GHz broadband systems from Anritsu

Instrument integration for 50 GHz load pull tuners from Maury Microwave

Instrument integration for mmW heads from VDI, OML and Rohde & Schwarz

Instrument integration for sub-THz heads from VDI, OML and Rohde & Schwarz

Upgrades EPS-ACC-150MMW-THZ with all additional configuration features of EPS-ACC-150MMW-WG

Integrations with FormFactor's angled RF arms for easy change between different measurement applications are completely modular. Simply choose between a manual or programmable positioner body (RPP404/RPP504) and add a specific arm.

\* The EPS200MMW manual probing solution includes: PM8 probe station with a 200 mm chuck stage, a tailored mmW platen, contact height gauge, rigid scope bridge with 150 mm x 100 mm movement, unique SlimVue microscope, camera-ready C-mount, vibration-isolation solution, dedicated 200 mm RF chuck with ceramic AUX inlay, fine theta adjustment, full WinCal XE software license, probe cleaning brush, ProbePolish, contact substrate, tweezers and accessories set.

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EPS200MMW\_FLYER\_2022

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